

may be caus'd by a vegetative principle, which was a coadjutor to the life and growth of the greater Vegetable, and was by the destroying of the life of it stopt and impeded in performing its office; but afterwards, upon a further corruption of several parts that had all the while impeded it, the heat of the Sun winding up, as it were, the spring, sets it again into a vegetative motion, and this being single, and not at all regulated as it was before (when a part of that greater *machine* the pristine vegetable) is mov'd after quite a differing manner, and produces effects very differing from those it did before.

But this I propound onely as a conjecture, not that I am more inclin'd to this *Hypothesis* then the seminal, which upon good reason I ghes to be Mechanical also, as I may elsewhere more fully shew: But because I may, by this, hint a possible way how this appearance may be solv'd; supposing we should be driven to confes from certain Experiments and Observations made, that such or such Vegetables were produc'd out of the corruption of another, without any concurrent seminal principle (as I have given some reason to suppose, in the description of a *Microscopical* Mushroom) without derogating at all from the infinite wisdom of the Creator. For this accidental production, as I may call it, does manifest as much, if not very much more, of the excellency of his contrivance as any thing in the more perfect vegetative bodies of the world, even as the accidental motion of the *Automaton* does make the owner see, that there was much more contrivance in it then at first he imagin'd. But of this I have added more in the description of Mould, and the Vegetables on Rose leaves, &c. those being much more likely to have their original from such a cause then this which I have here described, in the 13. *Scheme*, which indeed I cannot conceive otherwise of, then as of a most perfect Vegetable, wanting nothing of the perfections of the most conspicuous and vastest Vegetables of the world, and to be of a rank so high, as that it may very properly be reckon'd with the tall Cedar of *Lebanon*, as that Kingly Botanist has done.

We know there may be as much curiosity of contrivance, and excellency of form in a very small Pocket-clock, that takes not up an Inch square of room, as there may be in a Church-clock that fills a whole room; And I know not whether all the contrivances and *Mechanisms* requisite to a perfect Vegetable, may not be crowded into an exceedingly less room then this of Moss, as I have heard of a striking Watch so small, that it serv'd for a Pendant in a Ladies ear; and I have already given you the description of a Plant growing on Rose leaves, that is abundantly smaller then Moss; insomuch, that neer 1000. of them would hardly make the bigness of one single Plant of Moss. And by comparing the bulk of Moss, with the bulk of the biggest kind of Vegetable we meet with in Story (of which kind we find in some hotter climates, as *Guine*, and *Brasile*, the stock or body of some Trees to be twenty foot in Diameter, whereas the body or stem of Moss, for the most part, is not above one sixtieth part of an Inch) we shall find that the bulk of the one will exceed the bulk of the other, no less then 2985984 Millions, or

or 2985984000000, and supposing the production on a Rose leaf to be a Plant, we shall have of those *Indian* Plants to exceed a production of the same Vegetable kingdom no less then 1000 times the former number; so prodigiously various are the works of the Creator, and so All-sufficient is he to perform what to man would seem impossible, they being both alike easie to him, even as one day, and a thousand years are to him as one and the same time.

I have taken notice of such an infinite variety of those smaller kinds of vegetations, that should I have described every one of them, they would almost have fill'd a Volume, and prov'd bigg enough to have made a new Herbal, such multitudes are there to be found in moist hot weather, especially in the Summer time, on all kind of putrifying substances, which, whether they do more properly belong to the *Classis* of *Mushrooms*, or *Moulds*, or *Mosses*, I shall not now dispute, there being some that seem more properly of one kind, others of another, their colours and magnitudes being as much differing as their Figures and substances.

Nay, I have observ'd, that putting fair Water (whether Rain-water or Pump-water, or *May-dew*, or Snow-water, it was almost all one) I have often observ'd, I say, that this Water would, with a little standing, tarnish and cover all about the sides of the Glas that lay under water, with a lovely green; but though I have often endeavour'd to discover with my *Microscope* whether this green were like Moss, or long striped Sea-weed, or any other peculiar form, yet so ill and imperfect are our *Microscopes*, that I could not certainly discriminate any.

Growing Trees also, and any kinds of Woods, Stones, Bones, &c. that have been long expos'd to the Air and Rain, will be all over cover'd with a greenish scurff, which will very much foul and green any kind of cloaths that are rubb'd against it; viewing this, I could not certainly perceive in many parts of it any determinate form, though in many I could perceive a Bed as 'twere of young Moss, but in other parts it look'd almost like green bushes, and very confus'd, but always of what ever irregular Figures the parts appear'd of, they were always green, and seem'd to be either some Vegetable, or to have some vegetating principle.

Observ. XXII. Of common Sponges, and several other Spongie fibrous bodies.

A Sponge is commonly reckon'd among the *Zoophyts*, or Plant Animals; and the texture of it, which the *Microscope* discovers, seems to confirm it; for it is of a form whereof I never observ'd any other Vegetable, and indeed, it seems impossible that any should be of it, for it consists of an infinite number of small short *fibres*, or nervous parts, much of the same bigness, curiously jointed or contex'd together in the form of a Net, as is more plainly manifest by the little Draught which I have added